

Civil Aviation Safety Authority of Papua New Guinea
Register of Airworthiness Directives



PNG AD/GEN/020 - PRATT & WITHNEY ENGINE PT6A FAILURE OF CERTAIN FIRST STAGE REDUCTION SUN GEAR

Applicability:

This Airworthiness Directive applies to all Pratt & Whitney Engine PT6 A -15AG, -27, -28, -34, -34AG, -34B and -36. The AD is issued due to the failure of certain first stage reduction sun gears part number E3024765, serial number PC5-091 through PC5-176 manufactured by Timken Alcor Aerospace Technologies, Inc (TAATI). These gears are manufactured under a part manufactured approval (PMA) as replacement parts for installation in propeller reduction gear box assemblies of Pratt & Whitney Canada PT6A series engines. About half of the suspected sun gears have already been taken out of service. This condition, if not corrected, could result in failure of the shaft portion of the sun gear, which will result in an engine in flight shut down, possible uncontrolled engine failure, aircraft damage, and serious injuries.

Requirements:

This AD requires the removal of the affected PMA replacement Timken Alcor Aerospace technologies, Inc first stage reduction sun gear and the interacting planet gears, from the propeller reduction gearbox assembly.

Upon receipt of this AD, do not install on any aeroplane, any engine or power section module with a TAATI PMA replacement first stage reduction sun gear, P/N E3024765, S/N PC5-091 thru to PC5-176.

Compliance: Within 15 hours or 15 days, whichever occurs first after receipt of this AD.

This AD becomes effective on the 26th September 2011.


WILSON SAGATI

Chief Executive Officer,
Civil Aviation Safety Authority of PNG